



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/750,165

12/31/2003

J. Nelson Wright

341148021US

5006

69414 7590 07/23/2010
CALYPSO MEDICAL / PERKINS COIE, LLP
P.O. BOX 1247
SEATTLE, WA 98111-1247

EXAMINER

WEATHERBY, ELLSWORTH

ART UNIT

PAPER NUMBER

3768

NOTIFICATION DATE

DELIVERY MODE

07/23/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentprocurement@perkinscoie.com

Office Action Summary	Application No. 10/750,165	Applicant(s) WRIGHT ET AL.	
	Examiner ELLSWORTH WEATHERBY	Art Unit 3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 and 32-38 is/are pending in the application.
- 4a) Of the above claim(s) 6-27,32-34,37 and 38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,35 and 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/27/2009 has been entered.

Election/Restrictions

2. Applicant's election without traverse of claims 1-5 and 35-36 in the reply filed on 04/02/2010 is acknowledged.

Claim Objections

3. Claims 1, 4 and 35-36 are objected to because of the following informalities: Regarding claims 1 and 35, "applying an excitation at one of a set of frequencies" is unclear. That is, it is not clear if an excitation is applied at a single frequency or if refers to a range. The claim language should read, "*applying an excitation at a frequency selected from a set of frequencies*". Regarding claim 4, the claim language "the frequencies have frequencies that are uniformly spaced apart" is unclear. Exemplary claim language should read "*the set of frequencies has frequencies that are uniformly spaced apart*" or "*the frequencies are uniformly spaced apart*". Regarding claim 36, the

claim depends from withdrawn claim 33. For the purposes of Examination the Examiner will interpret claim 36 to depend from claim 35. Further regarding claim 36, it is not clear by the claim language whether the claimed "the set of frequencies" is referring to claim 35's "first set of frequencies", "second set of frequencies" or both. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-5 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paradiso et al. (USPN 6,404,340) in view of Rodgers et al. (USPN 6,340,932).

7. Paradiso et al. (hereinafter Paradiso) teaches locating a marker associated with a patient (col. 2, ll. 26-47), the marker having a marker resonant frequency (col. 2, ll. 47-50), the method comprising, applying an excitation at one of a set of frequencies to the marker using an excitation source (col. 4, ll. 51-53); receiving a plurality of inputs indicative of a sensed magnetic flux induced by the marker in response to the excitation (col. 3, ll. 53-57; col. 5, ll. 3-5); repeating the exciting and receiving steps across a range of frequencies (col. 4, ll. 51-58); identifying the marker resonant frequency based upon the multiple sets of plurality of inputs (col. 5, ll. 3-5); Paradiso goes on, teaching analyzing the resonance set of plurality of inputs indicative of a sensed magnetic flux to induced by the marker in response to the excitation at the marker resonant frequency and determining the location of the marker by analyzing the resonance set of plurality of inputs (col. 2, l. 6-28; col. 4, l. 47- col. 5, l. 28). Paradiso also teaches determining the location of each marker's unique resonance frequency by sweeping through a range of frequencies (col. 5, ll. 3-5).

8. Paradiso does not expressly teach adjusting the excitation source to provide further excitation at a marker resonant frequency.

9. In a similar frequency, Rodgers et al. (hereinafter Rodgers) teaches a carrier with antenna for RF identification (Abstract; Figs. 1-33). Rodgers teaches that RFID systems find applications in a plurality of fields and provides an exemplary arrangement where an interrogator (e.g. excitation source) operates using a plurality of transceivers, each transceiver programmed with a unique identifier (col. 1, ll. 26-45), where each transceiver includes a resonant circuit (col. 2, ll. 14-44). Here, Rogers teaches providing

improved efficiency with faster or more accurate identification of transceivers (col. 3, ll. 1-11). The system and method interrogates a plurality of RF resonant circuits (201, 232) with a carrier wave band (170) where signal (172) represents the response of the RF resonant circuits detectable by the system (col. 14, ll. 21-44). Rodgers goes on, teaching that the interrogator applies the transmit-receive function iteratively, incrementing the transmit frequency until all the transmit frequencies have been transmitted (col. 16, ll. 1-12). Upon completion of the iterative incrementing of the transmit frequency the peak values of the returned signal properties are determined, which identifies one or more candidate frequencies (col. 17, ll. 1-36). Upon identification of candidate frequencies further analysis may be employed to determine which of the candidate frequencies is optimal, where a subscan procedure provides further excitation at the RF resonant circuit's resonant frequency (col. 18, ll. 1-25). The Subscan procedure is repeated and the RF resonant circuit is identified based on the response from (col. 18, ll. 26-57).

10. Because both Paradiso and Rodgers teach the detection and tracking of multiple circuits simultaneously, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tuning marker Paradiso in view of the robust RF device resonant frequency identification scheme of Rodgers et al. The motivation to modify Paradiso in view of Rodgers would have been to more accurately identify the markers even in the presence of signal degradation or coupling by surrounding structures or antennas, as taught by Rodgers.

Response to Arguments

11. Applicant's arguments with respect to claims 1-5 and 35-36 have been considered but are moot in view of the new ground(s) of rejection.
12. First, the examiner stands that applicant has not made the required corrections to claims 1-5 and 35-36 to overcome the 08/07/2008 claim objections.
13. The Examiner acknowledges that the Paradiso reference alone does not anticipate the applicant's invention. This was determined through a very constructive interview, which occurred on 10/22/2009 and summarized by the 11/12/2009 Examiner Interview Summary Record. However, Rodgers et al. cures the agreed deficiencies of Paradiso.
14. Nevertheless, the Examiner recognizes the applicant's contribution to the prior art. However, the instant claims 1-5 and 35-36 are substantially broad such that RFID tags, which are known to be embedded in various objects including clothing, employee identification cards or the like may be applied as prior art. That is, the recitation marker associated with a patient has not been given substantial patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand

alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

15. Thus, the instant claims may be classified in any or all of the following classes: 33/355R, 33/700+, 324/345, 324/200, 340/572.1-572.8. Accordingly, there is a multitude various analogous or even non-analogous that may be applied to anticipate the present invention. In order to focus the invention toward the medical field the Examiner suggests amending positive limitations including tracking the markers or positioning a patient on a patient treatment couch and positioning the excitation source thereat as described in the instant specification (0051). The Examiner recognizes Applicant's contribution to the prior art and welcomes Applicant to a telephonic interview for questions or clarification.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELLSWORTH WEATHERBY whose telephone number is (571) 272-2248. The examiner can normally be reached on M-F 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/EW/

/Long V Le/
Supervisory Patent Examiner, Art Unit 3768